NO 135
1903

LAND RECORDS AND AGRICULTURE.

PART I.—RECRUITMENT.

1. The Secretary of State has no objection to act in special cases in the spirit of the following proposals made by the Government of India in their Despatch No. 10, dated 1st September 1883; but he does not consider it advisable to lay down any such general rule as is contained in the beginning of clause 2, or to make provision other than with reference to the probable requirements of the Agricultural Departments. In other words, while refusing to assent to the suggestion as to the service generally, he is willing to grant facilities for the study of agriculture in individual cases, so as to provide a body of trained officers from whom, as occasion required, the staff of the Agricultural Departments might be recruited. The Local Governments should submit special recommendations whenever they deem it for the good of the service that any particular officer should avail himself of the proposed opportunities for agricultural study in Europe. Such recommendation should be made only with reference to the prospective demands of the Agricultural Department, and the Secretary of State will then deal with each case on its merits:—

(1) That the rule, which restricts furlough to officers who have served at least eight years in India, be so far relaxed as to allow a Local Government to select, for the contemplated training, any officer of not less than five years' active service who is willing to avail himself of furlough. It seems desirable that the training should be given at an early period of an officer's career, in order that he may have fuller opportunities of turning it to practical advantage hereafter in India. If the selection be confined to officers of eight years' standing and over, the field of choice is reduced, and the selected officers may not improbably profit less from the training than they would have done had it been given at an earlier age.

(2) That each Local Government should be authorized to select one officer every two years and the minor administrations one every four or five years, within the prescribed limits of service. The officers so selected would be considered to be placed on furlough to England on ordinary furlough allowances and would be required to proceed to some suitable college in England, and there go through a complete course of study in agriculture. As the course at such institutions appears usually to last for two years, it would be necessary to grant furlough to this amount to every selected officer, even though it might not be wholly due to him under the ordinary rules, and even though the officer may not have rendered three years' continuous service according to the definition of the phrase "continuous service" in the Codes of the Financial Department. We propose that any officer who succeeds in obtaining a diploma or equivalent certificate of competence should be re-imbursed his college fees and be allowed to count one year of the course as service for pension. We would not grant these concessions to any officer who fails to acquit himself with credit at the institution to which he is deputed. The selection in India would of course be confined to officers who have already shown practical application for and interest in agriculture, and the training would naturally qualify them for em-

ployment in the Agricultural Department. But we would have it clearly understood that the attainment of a diploma or certificate would not give the holder any specific claim to employment of this description on his return to India, as it would be undesirable to fetter in this way the discretion of the Local Governments. Whether or not the officer be eventually employed as a Director or Assistant Director of Agriculture, the training would generally be useful to him in any executive capacity, and to the State it would be well worth the moderate inducements which we propose to offer.

(S. of S. Nos. 137 (Pub.), dated 13th December 1883, and 53 (Rev.), dated 10th July 1884, and G. I., R. & A., Nos. 38-A., dated 13th March 1884, and 100-A., dated 27th August 1884; *vide* G. Rs. Nos. 2778, dated 2nd April 1884, and 7425, dated 17th September 1884.)

2. Great care should be exercised in the selection of officers to undergo an agricultural training in England. No officer should be selected who is not considered to have a special aptitude for the duties required in the Agricultural Department.

The necessity for confining the number of recommendations within reasonable limits should also not be overlooked. The object of the training is to provide a body of trained officers from whom, as occasion may require, the staff of the Agricultural Department may be recruited.

No officer who does not complete the agricultural course and receive a diploma will be entitled to the privileges offered; and it is not contemplated that every officer after obtaining the diploma of Cirencester College should on his return to India be enabled to claim, as a right, an appointment in the Agricultural Department.

(S. of S. No. 53 (Rev.), dated 10th July 1884, and G. I., R. & A., No. 100-A, dated 27th August 1884; *vide* G. R. No. 7425, dated 17th September 1884.)

3. The diploma of the Downton College of Agriculture may be accepted as of equal value to that of the Royal Agricultural College at Cirencester for the purpose of Government patronage in regard to Indian agricultural students. (G. I., R. & A., No. 44A-91-2, dated 7th May 1888; *vide* G. R. No. 3802, dated 11th June 1888.)

PART II.—SALARY, FUNCTIONS AND DUTIES OF THE DIRECTOR.

1. The office of Director* of Agriculture is one of observation and experiment, and it is not expedient to begin by attempting to lay down exact rules and forms to regulate the duties. Everything bearing on agricultural prosperity and decadence is within his province, and subject-matter for his suggestions. But it is necessary to define the position of the Director relatively to other officers and departments and to state in general terms what duties Government expect him to perform.

The preparation of agricultural statistics will be an object of the Director's special care.

The Director should subject the reported results of crop experiments to careful analysis and criticism, himself conducting test experiments as far as he is able.

Another branch of duty which the Agricultural Department will undertake is connected with the revision of survey settlements, and consists in maintaining the statistical record which is placed before the authority entrusted with the revision of rates of assessment.

The general scope of the Director's duties is described as follows in the office note appended to Government Resolution No. 4576 of June 16th, 1883 :—

"The justification of an appointment of a Director of Agriculture is mainly to be deduced from the present rapid extension in India of railways and irrigational canals, working together as promoters of higher agriculture and trade in produce. It is to be feared that little good is to be done by the application of scientific agriculture to large parts of the uplands of India such as the plain of the Deccan. It can hardly be but that for at least a long time to come the cultivation of these poorer lands will give small and uncertain profits, and that those who till them will be poor and in debt. The improveable part of the public estate is the richer lands and especially those where a good soil can be made to produce valuable exportable commodities with certainty of a regular profit by the aid of perennial irrigation. These lands are, or soon will be, in the hands of a more substantial class of farmers, who are able to work them by the aid of some capital, and are capable of appreciating scientific methods of adding to their returns.

"Now it cannot be doubted that there is one side of public business which district officers are unable, from their other manifold duties, to carry on in a very thorough, sagacious and systematic way. This is the improvement of the State land rents by all those expedients which a liberal and judicious landlord adopts for the improvement of his own estates. The changes and transfers in appointments alone are sufficient to prevent district officers from applying thorough knowledge to the land. It seems quite possible that at some future time this branch of the administration may be entrusted to a distinct set of public officers. But this will be for a distant epoch of material development. Still there appears to be a good deal coming under this head on which even one officer

* Under Government Resolutions Nos. 6090, dated 9th September 1887, and 7548, dated 7th November 1887, the designation has been altered to "Director of Land Records and Agriculture."

giving his whole time and thought to it may be engaged with advantage.

"Such an officer should closely associate himself with the better class of farmers, and study their aspirations and needs. He will supply them with information and materials, direct them to improvements, help them to obtain easily such capital as they want, place them in communication with merchants at the ports and large towns, advertise the products which they have to offer for disposal and so on. He should specially take under his observation the better tracts which are under canals and accessible by railways and particularly the rich lands adjacent to large towns. He will utilise the experimental farms which it is part of the scheme to maintain and increase. He will also communicate with merchants and exporters and assist any enterprizes in the way of farms and manufactories in the districts. He should also note the condition of the agriculturists in various tracts, the bearing of the laws and executive regulations upon them, any special causes of depression, peculiar customs or prejudices. He should study the nature of the produce exported from each district, where it finds a market, in what quantity and what difficulties it contends with from defective communications, exactions in Native States, &c.

"Such an officer should, if he uses his time well, soon gain the confidence of a class of enterprising farmers whose interests he would take care of, and teach them to make full use of the advantages which Government so liberally offers. He would recommend special cases for specially favourable terms.

"He would not clash with other officers and departments because his sphere would be quite distinct from those of the Collector or Irrigational Engineer, but he would assist them all and make use of their local knowledge and influence.

"All agricultural statistics would of course be his special affair. There is an excellent base of such statistics in the village forms in Bombay, but they are not fully utilised from want of time and attention. The yearly estimates of crops and returns of land under each are still imperfect.

"It is not necessary to amplify further in this note. But it will be essential that such an officer, if appointed, should have a set of definite instructions as to what he is expected to do. For this purpose he should be supplied with a list of heads on which Government will look to him for information and under each of which he would report annually what he has done. He might begin by putting together a statistical sketch from his own point of view of each district, mapping it out with tracts according to productive capacity, irrigational facilities, &c., and indicating the special tracts which he expects to be the objects of his particular attention. These sketches or outlines may be printed for the use of the special officer and of the Revenue Secretary, and subsequent detailed reports can refer to the sketch to which they belong.

"The detailed reports would be close studies of special tracts, their peculiarities and wants, and suggestions how to meet them.

"The general report might give the observations of the year under the following heads:—

1. Season and harvest.

2. Communications. Use of railways, roads for transport of produce; any new facilities in the year; routes principally followed; any obstructions met with; needs of additional railways and roads.

3. Canals. Use made of them; products raised; any complaints or petitions as to management and supply; feelings of the people for or against them; possible additions.

4. Wells and other means of irrigation.

5. Takavi; loans taken up; where they would be useful; difficulties felt by agriculturists.

Stock. Horse and cattle shows; sufficiency of plough-cattle in districts under observation; suggestions for improvements; experiments.

7. Trade in agricultural produce. Course taken; increase or decrease; means of encouragement.

8. Introduction of European capital and enterprise in manufacture or farming.

9. Notes on agricultural implements, seeds, manure, &c.

10. Model Farms.

11. Crop experiments.

12. Agricultural statistics. Area under cultivation with various crops.

"The report will be made on such date as to supply a section of the General Administration Report.

"This officer should also send to Government a monthly season report, from June onward, of the cultivation and prospects of the harvest.

"The report of the Model Farms would of course pass through his hands and he would be in constant communication with their superintendents.

"The agricultural returns for the Commissioner's revenue reports would be prepared under his care."

(G. R. No. 5542, dated 26th July 1883.)

2. The Land Revenue Department proper is under Sections 17, 109, 110 of the Land Revenue Code responsible for the land record, and the district and divisional establishments sanctioned under the orders marginally noted are entirely subordinate to the Commissioners and Collectors. The position of the Superintendents of Land Records and Agriculture is that of Assistants to the Commissioners to whose orders they will be generally subject,* and at whose head-quarters they will reside. They are not Assistants to the Director of Land Records and Agriculture. They should be gazetted *ex-officio* Assistant to the Collectors in each district of the Division to which they are attached, and when working in those districts they will work as Assistants to the Collectors concerned. Their duties and the functions of the Director, so far as his connection with the land records and his subordination to the Divisional Commissioners are concerned, are summarised below.

Government Resolution No. 6403, dated 22nd September 1888.
Government of India letter No. 91, dated 4th February 1889.
Bombay Government letter No. 4101, dated 6th June 1889.
Government of India letter No. 550, dated 3rd August 1889.

(2). *The Director of Land Records and Agriculture* should test the competence of the subordinate officials to perform the duties required of them: their proper

Government of India letter No. 550, dated 3rd August 1889.

*The orders regarding the position of Superintendents as Assistants to the Divisional Commissioners having been overlooked in several instances, attention was drawn to them by G. Rs., F. D., Nos. 4478, 4691 and 4708, dated, respectively, 12th, 28th and 29th November 1892, and it was directed that on matters connected with the district and divisional establishments of the Department of Land Records and Agriculture the Commissioners and not the Director should be addressed.

observance of the rules laid down for their guidance: he should undertake the inspection and, where necessary, the revision of maps: frame rules subject to the approval of the Divisional Commissioners and final sanction of Government for the guidance of district establishments: he should examine the work of the district establishments, and report to the Collectors any defects, errors and shortcomings.

Government Resolution No. 8914, dated 25th November 1889, approved by Government of India letter No. 189 C. I., dated 30th January 1890.

As regards his duties outside these, the following orders have been laid down:—

"Mr. Ozanne should be considered under the immediate orders of the Revenue Department and should correspond with the Secretary to Government in that Department. He should forward his letters to Government either through the Divisional Commissioner or the Survey Commissioner, as may be appropriate in each case. He is at liberty to correspond direct with Collectors, officers of Survey and others on matters relating to his province, keeping however in view the supervisional authority of the Commissioners when any change of practice is proposed."

Government Resolution No. 5542, dated 26th July 1883.

Statistical returns of agriculture required by the Secretary of State annually are compiled by the Director from the information furnished by the Collectors and Commissioners and are submitted by him direct to Government under the orders noted in the margin: while the annual *returns and reports of the rail and land-borne traffic* are submitted by him direct to Government with his review thereof, under the authority quoted in the margin.

Government Resolution No. 9706, dated 9th December 1884.

Government Resolution No. 1887, dated 5th March 1885.

Government Resolution No. 2220, dated 16th March 1885.

He further prepares periodical crop forecasts which are submitted by him direct to the Government of India, copies being furnished to this Goverment under the orders mentioned marginally.

Government Resolution No. 6386, dated 9th August 1884.

Under the orders marginally quoted he has the entire control in *account matters* relating to experimental farms, and corresponds direct with Government about them. His annual reports on crop experiments are submitted through the Commissioners. As regards special agricultural experiments undertaken from time to time, he corresponds direct with Government.

Government Resolution, Financial Department, No. 2710, dated 5th October 1887.

The orders noted in the margin entrust the Director with the control of the executive branch of the Civil Veterinary Department which includes (*a*) the Horse-breeding Department, (*b*) District Veterinary establishments,

Government Resolution No. 6287, dated 5th September 1890.

Government Resolution No. 2011, dated 18th March 1891.

comprising officers in charge of veterinary dispensaries and itinerating Veterinary officers. With reference to the former he corresponds direct with Government, but as regards the latter the following are the orders of Government:—"The veterinary graduates in charge of dispensaries and the itinerating veterinary assistants should be immediately under the orders of the District Committees, consisting of the Collector of the district and representatives of all contributing bodies; they should report to the District Committees, who will correspond with the Director of Land Records and Agriculture, and the latter officer with the Commissioners, and the Collectors and Commissioners and the Director of Land Records and Agriculture should notice the operations of the District Veterinary establishments and their results in their annual administration reports."

Government Resolution No. 2011, dated 18th March 1891, paragraph 7.

The Government of India have laid down the following rules under this head in their Resolution noted in the margin:—

Government of India Circular No. 25—1, dated 10th September 1891, and Bombay Government Resolution No. 7191, dated 19th October 1891.

I.—If in any Province the system under which information supplied periodically in normal times regarding prices, rainfall, state of the crops and agricultural stocks, and other circumstances from which the approach of scarcity and agricultural distress can be detected is, or is considered, imperfect, it shall be the duty of the Director of the Department of Land Records and Agriculture to submit to the Local Government and Administration to which he is subordinate suggestions for the improvement of the system. Any suggestions submitted under this rule with the orders passed thereon shall be briefly noticed in the annual report of the Department.

II.—Whatever system be established for the normal supply of information of the character described in Rule I, it shall be the duty of the Director of the department and his assistants to ascertain by periodical inspection that the system is in normal times being efficiently and properly worked in each district, and to report to the district officer and any other authorities, whom the Local Government may direct, any defects in its working.

III.—It shall be the duty of the Director to compile and collate periodically in an intelligent form the facts and statistics which are derived from the system established for the provision of the information of the character above described. For this purpose he should have full access under such rules as may be laid down by the Local Government to any statistical and agricultural returns and reports which are submitted by district officers to the higher Revenue authorities.

IV.—It shall be his duty to prepare from time to time after an examination both of settlement reports and other similar sources of information which may be available, as well as of the information periodically collated in his own office, a statement of the agricultural circumstances of each tract of the Province and of the measures, if any, which are in his opinion required to improve the agricultural efficiency thereof as prescribed in paragraphs 8, 9 and 10 of the Government of India Resolution No. 6--340--50--G., dated 8th December 1881.

Paragraph 6 of the same Resolution as explaining and elucidating the object of the rule is entered here:—

"6. It will be observed that the duties thus laid down for observance by the special departments are, while in consonance with those prescribed in the Resolution under which these departments were constituted, in no respect affected by the occurrence of famine or scarcity. The duties are such as must be continuously performed in normal times, and the object of them is the establishment and maintenance of a system under which the responsible authorities will receive timely warning of the approach of famine or scarcity. In more than one of the replies received from Local Governments on this subject the Resolution of 19th December 1889 appears to have been read as implying that the Local Government was to look to the special departments and not to district officers for the indications of approaching scarcity. This is very far from the intention of the Government of India. In the 6th paragraph of that Resolution it was explained that the Resolution of 1881, under which these departments were created, required them 'to organize and maintain a system under which the responsible authorities should be kept continuously and automatically provided with prompt intelligence of agricultural circumstances.' No suggestion was made, either in the Resolution of 1881 or of 1889, that intelligence should be supplied by district subordinates otherwise than to district officers, or to the Local Governments otherwise than by district officers through the usual channels. The Government of India demand only that the special department should be utilised to examine and report on the efficiency of the working machinery, not that the department should itself work the machinery. This policy is clearly understood and carried out in many provinces in which it is now fully realized that inspection by the officers of an expert department is necessary for the efficient maintenance of maps and records, and that with few exceptions the reports and suggestions of the inspecting officers are of material service to those district officers to whom they are made, and secure as a general result that maps and records are kept up to a uniform standard throughout the province. More than this the Government of India do not require."

The concluding sentences of the above paragraph confirm the views expressed by this Government regarding the position and functions of the Director of Land Records and Agriculture in previous paragraphs.

The attention of the Director of Land Records and Agriculture should be called to what is at the present time the most important part of his work: the special inspection of the work of the Circle Inspectors, and the systematising of the arrangements for keeping up the land records, and for recording and supplying accurate and intelligible statistics regarding prices, wages, rainfall, state of the crops, and agricultural stock, &c., especially in the Southern Division where the newly sanctioned staff is now working. It is desirable that he should now devote increased attention to perfecting arrangements connected with the maintenance of the land record, and the collection of agricultural and economical statistics.

(3). *The duties of Superintendents of Land Records and Agriculture or Assistant Commissioners* are the collation and preparation of the record in connection with the revision settlements as they fall due; the testing of survey work done by districts surveyors; the acting as professional referee

Government Resolution No. 6403, dated 22nd September 1888.

Bombay Government letter No. 4101, dated 6th June 1889, to Government of India.

to the Collector on such subjects; the compilation under the supervision of the Divisional Commissioners of statistics received from the Collectors and the forwarding of these to the Director; aiding Assistant Collectors and Mámlatdárs in the inspection of all village records and returns except those connected with the collection of land revenue; preserving the uniformity in system of correcting survey records by constant and thorough examination; and hereafter when the Survey Department has done its work, testing classification where the District Inspector is not a classer; signing ákárbands; and preparing proposals for the revision of rates. They are further to assist the Director of Land Records and Agriculture in the inspection and test of village statistics and forms, supervise the compilation of statistics for revisions, and aid the Director of Land Records and Agriculture in his duty of making a detailed analysis of agricultural tracts specially liable to famine.

Report of the Committee of 9th July 1890, approved by Government Resolution No. 7271, dated 14th October 1890.

(4). In this connection the Governor in Council desires to repeat the directions passed from time to time regarding the duties of Collectors and Assistant Collectors as to the inspections to be made by them, so that they may understand that the establishment of the system of inspection by the Divisional and Circle Inspectors does not release them from their ordinary duties of examination and inspection. The earlier orders were passed when it was proposed and intended to place the Inspectors under the Director of Land Records and Agriculture, and it is evident that those officers being under later orders subordinate to the Land Revenue authorities, the directions issued have now even greater importance attached to them. The first of these is as follows:—

Government Resolution No. 2557, dated 24th March 1884, paragraph 6.

"6. Indeed, the question of the discipline and control of the new establishment requires very careful thought and organization. The intention is to entertain a body of selected men for certain duties connected with the land administration and under the control of the Director of Agriculture. These duties are a part of the local revenue business, though they are to be entrusted to special officials that they may be performed with particular skill and efficiency. These officials are placed under the orders of the Director because they are to deal with matters specially within his cognisance. The Director will therefore formulate their duties and supervise their performance of them. But on the considerations stated in the previous paragraph, it must not follow that the new establishment is withdrawn from all affinity to the local revenue offices, and that the Circle Inspectors are to acknowledge no official allegiance to the Mámlatdár. It is clear that if three or four Circle Inspectors are resident in a táluka with no personal supervision by higher authority expect a periodical visit from the Assistant District Inspector, they will virtually be under very little control, and are not likely to work with energy and precision. The Mámlatdár therefore and *à fortiori* the Assistant Collector, should carefully watch the performance of their duty by the Circle Inspectors, though of course they will not

alter the instructions of the Director. Again, the Circle Inspectors will be an authority immediately over the village accountants and in this relation must bear due regard to the authority of the Mámlatdár, that the village officers may not be embarrassed by having two masters. Moreover it is not by any means intended that the Mámlatdárs and Assistant Collectors should be relieved of any part of the duty which they now perform in personally testing the preparation of statistical records in the villages and making inspections of crops and boundary marks. And the Collectors and their Assistants should on no account allow themselves to think that as certain operations have been placed under the control of a distinct department they are not any further concerned with them. All the matters which fall within the province of the Director of Agriculture should be matters of personal interest to the local Revenue officers. The Director and the Circle Inspectors are to supply them with improved means of knowing their districts."

Government Resolution No. 5036, dated 23rd June 1884, paragraph 4.

It was repeated to the Government of India in reporting further on the subject that "the same Resolution which gave the first practical effect to the scheme also conveyed (paragraph 6) the decision of Government that the revised staff was not to be separated from the Revenue establishments, or removed from subordination to the Mámlatdár, nor was their creation and connection with the Director to absolve the Mámlatdár or Assistant Collector or Collector from any of the duties hitherto attached to their offices in connection with the statistical records, or any other matter which falls within the province of the Director of Agriculture;"

Government Resolution No. 2825, dated 13th April 1889.

and finally in reviewing the annual report of the Director of Land Records and Agriculture for 1887-88, the following orders were passed emphasizing those previously issued:—

"The first part of this report, which contains a variety of interesting matter and reflects credit on the Acting Director, is as usual devoted to a detailed account of the work of the Circle Inspectors employed in Dhárwár and Bijápur. The Governor in Council is of opinion that their field-work—other than measurement—which as a check on village officers is specially important, was decidedly insufficient, and in this connection it is observed that Mr. Muir-Mackenzie admits the 'intense repugnance to field-work' exhibited by these officials. They evidently require close and systematic supervision, such discipline in fact as some of them were accustomed to while in the Survey Department, but the supervision actually exercised over their work by their immediate superiors appears to have been unsatisfactory in Bijápur and hardly sufficient in Dhárwár. Government have under consideration a scheme for the entire re-organization of this branch of the department, but until such re-organization is effected it is essential that sub-divisional officers in Dhárwár and Bijápur should carefully test the work of these inspectors; and indeed their boundary-mark inspection might with advantage be confined to such a test, the results of which should be communicated from time to time to the Agricultural Department. The attention of the Collectors of these districts should be drawn to the fact that no such communications were made in the year under report."

(G. R. No. 528, dated 23rd January 1892.)

3. Circumstances having occurred during the last few years which indicate that in more than one Province the functions of the Deparment of Land Records and Agriculture as a Department of Land Records have not been fully understood, the Government of India desire that the following explanation of their views and intentions in connection with this subject should be communicated to all Local Governments and Administrations.

(2). The formation of the Departments was first required by the Resolution of the 8th December 1881, in which the general scheme under which effect was to be given to the recommendations of the Famine Commissioners was laid down. In the 7th paragraph it was advised that the new Departments should be in some form connected with settlement administration with the view of maintaining up to date the land records upon which settlements were made. But it was expressly stated that—

"It is neither necessary nor advisable that the new Department should either exercise independent authority or should interfere with the responsibility of the local officials who are at present charged with the duty of maintaining any system of agricultural records and observation. The Department may undoubtedly be utilized by the governing authorities in assisting them to control and maintain any organization required for the continuous supply of agricultural information, yet its chief duty will be to deduce from the facts and figures thus supplied those conclusions or suggestions which the Famine Commissioners have shown to be necessary to the administration of a Province."

(3). The Government of India apprehend that, notwithstanding the clear injunction that no interfering authority was to be exercised by the new Department, yet that the use of the word 'control' may have led to a misapprehension on the subject. Their intention was that the Department should control the scheme under which land records are maintained but not the establishments or agency responsible for maintaining them. When, however, the Departments were first organized, the Directors were in some provinces allowed to assume considerable authority over the district establishments, and they have even been permitted by some recent Provincial rules to require the punishment or dismissal of officials on the land-record staff. In such cases it has become necessary for the Government of India to request the alteration of the rules with the object of securing to the district and divisional authorities the full executive control over the establishments with which it was not intended to interfere.

(4). The functions of the Director in connection with land-records may be classed under three heads—

I.—Organization.

II.—Inspection.

III.—Collation of results.

Under the first head it is his duty to bring before the superior revenue authorities proposals for the

maintainance of maps and records in the most efficient and economical manner. The main objects with which land records, including maps, are required to be kept up to date are—

(*a*) to simplify and cheapen periodical settlement operations;

(*b*) to provide a record-of-rights for the protection of all who hold interests in land;

(*c*) to reduce, simplify and cheapen litigation in the Revenue and Civil Courts; and

(*d*) to provide statistics necessary for sound administration in all matters connected with the land.

It is the duty of the Director both to advise the superior revenue authorities under what arrangements these objects can best be attained or in what manner the land records establishments should be organized, trained and tested so as to ensure the required results, and to point out from time to time any defects in the system which may have already been adopted.

(5). Under the second head, inspection, it is the duty of the director to inspect the land-records staff and their work in each district, and to bring to the notice of the district officer any irregularities in practice, or any shortcomings on the part of the officials whose work has been inspected. In some Provinces in which there is a Divisional as well as a District officer it has been found a convenient practice for the Director to submit his inspection notes to the latter officer, who forwards them to the Commissioner, with any orders which he, the District officer, may pass thereon. The Director himself is debarred from issuing any orders other than such verbal instructions and explanations on technical matters as he may communicate to the officials whose work he inspects.

Similar functions would be exercised by any Assistants to the Director. The Government of India, however, would prefer that functions of this kind should be assigned to those officials only who are of sufficient rank and status to be recognized as acting on behalf of the Director rather than as his subordinates, and that other Inspecting officers, if above the position of District inspectors, should be subordinate to the Commissioner or other controlling revenue authority rather than to the Director himself. It is apprehended that otherwise the authority of Divisional Officers may be weakened, and that proper relations between the Director and District officers may be disturbed.

(6). Under the third head little explanation of the duties of the Director is needed. The main objects, which the collection of agricultural statistics was intended by the Famine Commissioners to secure, must be prominently held in view. These are fully stated in the 8th, 9th and 10th paragraphs of the Resolution of 1881, and have in subsequent Resolutions and correspondence been summed up

under the term 'district analysis.' In this as in other branches of their work no control can be exercised by the Director over the District and Divisional staff, beyond drawing the attention of the authorities to any errors or shortcomings in the statistics and returns supplied to his office in accordance with rules sanctioned by the Local Government or to any defects in agricultural circumstances and conditions which may appear to call for preventive or remedial action. His chief duty is to see that full effect is given to the instructions of Her Majesty's Secretary of State quoted in the 1st paragraph of the Resolution, *viz.*:—

"To secure the more complete systematic ascertaining and rendering available of the statistics of vital, agricultural, and economic facts for every part of India, in order that Government and its officers may always be in possession of an adequate knowledge of the actual condition of the country its population and resources."

(7). Nothing in this Resolution is intended to affect the duties or position of the Director of Land Records if in addition to the office of Directorship he is entrusted with the control of settlements in the separate capacity of Settlement Commissioner.

(G. I., R. & A., No. 15-342, dated the 26th October 1893; *vide* G. R. No. 9007, dated the 8th December 1893.*)

4. The Director of Agriculture should be furnished with copies of all the various Resolutions referred to below under heads I—V in the Revenue and General Departments:

Revenue:—I. Topographical, and Geological Surveys;

II. Seasons, weather, crop experiments, cultivation, fibres;

III. Forest Settlement and Demarcation;

IV. Revenue Survey and Settlement; and

V. Annual Reports of the several Revenue Departments.

General.—I. Manufactures and Trade;

II. Mills and Factories;

III. Exhibitions;

IV. Cattle Breeding; and

V. Annual Administration Reports;

(G. R. No. 6693, dated the 18th August 1885.)

5. The Government of India have with the sanction of the Secretary of State promulgated the following rules for regulating the salary of Directors

* Under this Resolution the Government of India were informed by the Government of Bombay that the principles followed in this Presidency in the matter of the control of the establishments employed in the Land Records Department and the position of the Director of Land Records in that Department were in accord with those laid down in the Resolution of the Government of India, No. 15—342, dated the 26th October 1893, and that with the exception of the Director's office staff no establishments employed in the Land Records Department were placed under the direct orders of that officer.

of Land Records and Agriculture in the several Provinces:—

(1) The Director will draw the pay substantive or officiating of his contemporary, *i.e.*, the officer next below him in the regular line.

(2) He will receive Rs. 250 a month special allowance, provided that

(3) The maximum salary drawn, including pay and special allowance, will not exceed Rs. 1,800.

(4) No monthly travelling allowance will be permitted. Special travelling allowance under the ordinary rules will be granted, the daily rate being fixed with reference to the circumstances of the province concerned.

(G. I., R. & A., Nos. 69-51-6-R., dated the 12th October 1889, and 165, 170-C. I., dated the 25th January 1890; *vide* G. R. No. 1388, dated the 20th February 1890.)

6. Provision should be made in the budget whenever necessary for the purchase of live-stock for Experimental Farms, and the Director of Land Records and Agriculture is authorized to incur expenditure within the limit of such provision. (G. R. No. 8080, dated the 15th November 1890.)

7. The Director of Land Records and Agriculture is permitted to subscribe for a copy of "The Indian Textile Journal" for the use of his office. (G. R. No. 1340, dated the 19th February 1891.)

8. The Director of Land Records and Agriculture is authorized to correspond direct with the Agricultural Chemist to the Government of India on all technical matters connected with the work of that office. (G. R. No. 2003, dated the 17th March 1893).

PART III.—SUPERINTENDENTS OF LAND RECORDS AND AGRICULTURE AND DISTRICT AND CIRCLE INSPECTORS.

A separate compilation of rules and standing orders relating to the duties and supervision of Land Records and Agricultural establishments has been issued, and the rules and standing orders under this heading are omitted from this compilation.

PART IV.—REPORTS AND RETURNS.

1. The weekly reports on the state of the weather and crops should be telegraphed to the Revenue and Agricultural Department and not to the Home Department of the Government of India, the telegrams being despatched to the abbreviated address of "Revenue." (G. I., R. & A., No. 1-26., dated 14th July 1881.)

2. It should be impressed upon District officers that it is not sufficient to report correctly the state of the country in the immediate neighbourhood of head-quarter stations, but that a weather and crop telegram ought to indicate, as far as possible, the agricultural condition of a district as a whole. (G. I., H., R. & A., No. 11-503, dated 8th November 1880; *vide* G. R. No. 6196, dated 23rd idem.)

3. It is unnecessary to publish in the *Gazette of India* detailed information regarding the weather and agriculture of individual districts. Weekly reports on the season and prospects of the crops in each district of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, the Punjáb, the Central Provinces, Assam, Burma and Mysore are published in local Gazettes, and, being available in this form to the public and the Government of India, do not need repetition in the *Gazette of India*. In future, therefore, Local Governments and Administrations should cease to telegraph to the Government of India intelligence regarding separate districts, and should confine their telegraphic communications to a full and clear summary of those facts only which have an important bearing on the character of the season and the crops of each province as a whole. The summaries should present a sufficiently complete and accurate picture of the position in the week under report, to enable the Government of India to form a true opinion on the agricultural situation and prospects of each Province; and they should be so drawn up as to admit of their being published in the *Gazette of India* without revision or further reference to the Provincial authorities. They should indicate the general character of the rainfall of the week and the tracts in which the total rainfall of the season has been insufficient; the progress of agricultural operations; the state of the standing crops and the prospects and probable outturn of the harvests. They should contain also a brief account of any serious damage done to crops by insects, blights, hailstorms, floods or other natural calamities, and should notice the condition of agricultural stock, the failure of pasturage or fodder, and marked fluctuations in the prices of food-grains. In times of scarcity the areas affected, the number of people under relief and the state of food stocks should be regularly reported. The condition of the opium and other crops of commercial importance should be specially noticed. These instructions indicate generally the information which the Government of India call for in the weekly summaries, but do not

preclude Local Governments from adding any further particulars of interest and importance which may be considered necessary. Intelligent compilation is especially demanded. Instances have occurred in which returns have been submitted from certain districts without regard to facts, and have been permitted to repeat stereotyped and inaccurate phrases week after week. It is, therefore, desired that, whether or not the weekly returns can be submitted through the Department of Land Records and Agriculture, the question should be considered of placing upon that Department the responsibility of seeing that an uniform and well-regulated system of recording the facts above indicated is maintained. His Excellency in Council also rules that the use of local vernacular terms should, as unsuited to reports intended for general information, be entirely avoided. District reports may continue to be published in local Gazettes. Their main object is to show, from week to week, in a brief and succinct form, the actual conditions and prospects of agriculture in each district. They are not intended, therefore, to contain a notice of any facts which have no connection with, or bearing on, agricultural circumstances and prospects. The Government of India are specially desirous that strict attention should be given to the remarks and instructions in this paragraph. Separate copies of all district reports, whether weekly, monthly or half-yearly, published in the Gazettes of Local Governments, should be posted regularly to the Revenue and Agricultural Department of the Government of India, for information and record. Outbreaks of fever or of even cattle-disease, unless of dimensions sufficiently large to threaten the progress of agricultural operations, as was the case for instance in many parts of India after the famine in 1878-79, need not be noticed, and it is for similar reasons unnecessary to report the occurrence of small-pox or cholera except in the very rare cases where the mortality and prostration caused by these diseases are likely to affect the agricultural population to a serious extent. (G. I., R. & A., Nos. 59-A-124-1, dated 5th October 1887, and 64-A-124-2, dated 11th October 1887; *vide* G. R. No. 7541, dated 5th November 1887.)

4. The information contained in the weekly season telegraphic reports submitted to the Government of India should be general in character and confined more nearly to a description of the state of the crops and agricultural condition of the Presidency. The circumstances of individual districts or tálukas should be noticed as sparingly as possible, these details being reserved for publication in the Local Gazette. References to rainfall should also be curtailed, as the information of this description reaches the Government of India from other sources. (G. I., R. & A., No. 660-A.-4-5, dated 4th October 1889; *vide* G. R. No. 7862, dated 18th idem.)

5. It is necessary in accordance with the orders of the Government of India that the weekly sum-

mary of weather and agricultural reports should be despatched to them not later than 6 P.M. every Wednesday. In order to do this the various district reports made up as far as possible to Tuesday evening in each week must be delivered at the Secretariat in Bombay by Wednesday afternoon at the latest. To ensure their timely delivery they must, during such part of the season as the Collector is absent from head-quarters, be prepared by the Huzúr Deputy Collector from the reports submitted to him by the Mámlatdárs and Mahálkaris. When the Collector is at head-quarters he must personally supervise the preparation and submit the weekly summary of the reports to Government.

The instructions of the Government of India do not appear to have been properly attended to, the consequence being that the greatest difficulty is found in preparing the weekly summary required by the Government of India. The attention of all Collectors is called to the orders issued on the subject. With a view to avoid misunderstanding as to what is required and what is not, the appended note giving definite particulars has been prepared. The various reports will be published in the *Government Gazette*. It will be understood that these reports relate purely to ordinary years and seasons, and that in times of scarcity or famine special reports as prescribed in the Famine Relief Code, Bombay Presidency, will have to be submitted.

(*Note referred to above.*)

The following particulars should be given in the Collector's weekly summary:—

Rainfall during week.—If none has fallen, no mention need be made. The character of the fall should be noticed, whether it was excessive, normal, or deficient, general in the district or partial. The fall (*a*) for the week, (*b*) for the season, *during the monsoon* should be given.

(2) The tracts, if any, in which the fall is insufficient should be specified.

Note.—In the weekly season reports submitted during the monsoon, Collectors should specify the weekly rainfall at the head-quarter station in addition to the maximum and minimum falls in the district and the totals for the season from the 1st of June for the head-quarter station and for the stations which have received the maximum and minimum falls up to date.

The total rainfall for the season is to be given in the weekly reports only during the monsoon and not during the fair season. (G. R. Nos. 1341-Famine, dated 19th June 1897, and 527-Famine, dated 31st August 1898.)

(3) Progress of agricultural operations and state of the standing crops, whether kharíf or rabi.

(4) Probable outturn of harvest, whether kharíf or rabi, each being separately noted. When the anna valuation has once been given, it need not be repeated unless marked changes are found. This information to be submitted in the first and third weeks of each month, special notice being made

of crops of commercial importance such as cotton, wheat, linseed, and in Baroda of opium.

Note.—The "probable outturn" reports should be discontinued throughout the Presidency in the months of May and June. By the end of July a forecast of the crop, as probably a deficient one or the reverse, can generally, if not always, be formed. (G. R. No. 5073, dated 24th July 1891.)

(5) The condition of agricultural stock.

(6) *Marked* fluctuations in the price of food-grains.

Note.—Actual prices should be quoted only when the variation is considerable, say one Indian seer per rupee, and the price should usually be given only for the head-quarter town in seers per rupee and to the nearest seer. (G. R. No. 1341-Famine, dated 19th June 1897.)

(7) If serious damage has been done to any crop by unforeseen natural calamity, it should be reported.

(8) If fodder or pasturage prospects are bad, they should be reported; if normal they need not be noticed.

(9) Epidemic or epizootic disease should be reported only if of so severe a character that it interferes with the progress of agricultural operations.

(10) The standing instructions as to date of despatch to Government of these reports remain in force.

(11) The use of such phrases as "prospects unchanged," "same as last week" and the like should be avoided. Local vernacular terms should not be used. (G. R. No. 794, dated 3rd February 1888.)

The report from the Thar and Párkar District should be submitted to reach the Secretariat before 12 noon on every Wednesday. It should comprise information up to Saturday of the previous week, with any later particulars that can be given up to Tuesday evening when it is transmitted. (G. R. No. 8088, dated 25th November 1881.)

The weekly reports on the condition of the season and crops from Thána and other districts situated as Thána is as regards facilities for postal communication with Bombay should be sent by post. The reports from other districts should ordinarily be transmitted by telegraph as 'deferred' messages. The telegrams should reach the Secretariat at the latest in the afternoon of every Wednesday. They should therefore, as a rule, be sent to the Telegraph office on Tuesday evening marked as 'deferred'. Whenever this cannot be done owing to unavoidable circumstances, and the telegrams have to be sent on Wednesdays, they should be marked as 'urgent', but in any case they should continue to comprise information up to the evening of every Tuesday. (G. C. No. 249, dated 14th January 1882, and G. R., F. D., No. 1947, dated 7th July 1885.)

6. The form noted below should be adopted in the preparation of the weekly season reports for the

Ahmedabad, Kaira, Broach, Surat, Thana, Násik, Khándesh, Poona and Sholápur Districts from which the reports are sent by post. The form is based on the instructions circulated with Government Resolution No. 794, dated 3rd February 1888, which should be strictly followed in the preparation of the reports for the districts named above as well as the other districts from which the reports are sent by telegram.

The Superintendent, Government Central Press, should keep copies of the form in stock to meet the requirements of the officers concerned.

Season Report of the *District for the week ending* *1899.*

AMOUNT AND CHARACTER OF RAINFALL.		Tracts in which rainfall is insufficient.	Progress of agricultural operations and state of standing crops.	Prospects and probable outturn of crops, especially of those of commercial importance.	Condition of fodder supply and agricultural stock.	Marked fluctuations in prices of food-grains.	Epidemic or epizootic disease interfering with agricultural operations.
For week.	For season.						

No. OF 189 .

Forwarded to Government in the Revenue Department.

Collector.

(G. Rs. Nos. 6834, dated 27th September 1890, and 1493, dated 24th February 1891.)

7. In the weekly reports on the state of the season and prospects of the crops a concise description of the crops should be given in lieu of anna estimates which in consequence of doubts about the "standard" are found to be frequently misleading. (G. C. No. 1709, dated 6th March 1891.)

8. The appearance and movements of locusts should be noticed in the weekly weather and crop reports in such additional detail as may be convenient. It is not desired, however, that the weekly telegraphic reports which are submitted to the Government of India should contain more detail than at present.

Copies of the weekly weather and crop reports, as published in the Provincial Gazettes, containing references to locusts, and of any special reports which are made by District officers and others to Local Governments, should be forwarded direct to the Trustees of the Indian Museum for transmission to the officer of the Indian Museum entrusted with the entomological work. (G. I., R. & A., No. 151-159-C., dated 18th January 1890; *vide* G.R. No. 1159, dated 12th February 1890.)

9. The order contained in the Revenue and Agricultural Department Circular No. 64-4-48 A., dated 28th September 1889, deprecating unnecessary allusion in the weekly weather and crop reports to sporadic cases of cattle disease, was not intended to exclude a report on the state of the fodder and water-supply and its effect on agricultural stock. Such information affords a most important illustration of agricultural prospects. Where this is not already done, information may be included in the weekly reports as to the condition of cattle and the supply of fodder and water. (G. I., R. & A., No. 18-1, dated 20th July 1891; *vide* G. R. No. 5579, dated 14th August 1891.)

10. The Superintendent, Government Central Press, should supply the Meteorological Reporter for Western India with a copy of the telegraphic weather and crop reports which are published weekly in the *Bombay Government Gazette*. The Meteorological Reporter should also be supplied with copies of reports of damage caused by heavy rains, floods, high winds or tides which may be received in the Revenue, General, Political, Marine and Public Works Departments. (G. R. No. 6504, dated 13th August 1884.)

11. Mámlatdárs and officers in charge of stations who send periodical postcards to the Director of Land Records and Agriculture under the orders contained in Government Resolution, General Department, No. 1788, dated 18th May 1886, should send him during the monsoon also special postcards after a break* of over seven days' duration whenever (1) a fall of over 50 cents takes place in one day or (2) a fall of one inch or more occurs in not more than three consecutive days. In either case if rain is falling when the special card is sent, the fact should be notified. No further intimation will be required up to the time of despatching the usual weekly message. In this manner the Director will know of the continuance of scarcity in any district or part of a district up to within four or at most five days before any given date for the most remote stations in the Presidency. (G. R. No. 6814, dated 12th October 1888.)

12. For the purposes of the weekly telegraphic report, Mámlatdárs should make reports similar to

* A break means a period on every day of which the rainfall is less than 50 cents, or in which the rainfall during any three consecutive days is less than one inch.

those directed in the foregoing Resolution to the Collector by special card for all rainfall, of which the information will reach the Collector before Tuesday evening. This arrangement will enable Collectors to include the latest information available in their weekly telegraphic reports. (G. R. No. 5443, dated 10th August 1891.)

13. The Annual Report of the Agricultural Department should be divided into the following heads:—

I. Organization and maintenance of village records.

II. Analysis of districts with reference to security from famine.

III. System of collection of revenue and rental in precarious tracts.

IV. Measures of protection, including—

(1) Fodder reserves and arboriculture.

(2) Extension of communications.

(3) Irrigation.

V. Agricultural experiments, including farms.

VI. Cattle-breeding and veterinary establishments.

VII. Agricultural and fiscal statistics.

VIII. Trade and trade statistics.

The subject of communications would be primarily considered under Head II, and any remarks under Head IV (2) would ordinarily be confined to improvements effected, or likely to be effected, in the agricultural condition of a district by communications opened during the year under report.

In any case in which the subject for which a heading is provided is not one dealt with by the Agricultural Department, and also as regards any other questions which are dealt with in the Revenue Administration Report, it will be sufficient to treat them by reference in the Agricultural Department Report, noting where the information required will be found.

(G. I., R. & A., No. 54-A., dated 28th April 1884; *vide* G. R. No. 4333, dated 29th May 1884.)

14. It was intended when the skeleton heads of the report of the Department of Land Records and Agriculture were prescribed in Government of India Circular Resolution No. 54-A., dated 28th April 1884, that the report itself should not be more than an historical abstract of the main events and results of the twelve months' working of the department, and it was assumed that either questions admitting of discussion or details of experiments and agricultural investigations would be dealt with in separate departmental papers or reviews. The reporting work of a department of Land Records and Agriculture may, without conflicting with the views expressed in previous Circulars and Resolutions of

the Government of India, be divided under three heads:—

(1) Reports of a technical character.

(2) Reports on which the orders of the Local Government are required.

(3) Historical abstract of the year's operations.

In the first class would be included reports from experimental farms with the orders of the Director thereon, or tabular statements showing results of experiments; accounts of trials with new implements and machines and the like. Reports of this kind would under the instructions conveyed in Government of India Circular Resolution No. 143½A.-77-4 of the 28th December 1885 be communicated direct by the department, without delay, not only to the Government of India, but also to all Provincial Agricultural Departments for early information. It is for this reason that they should include no matter upon which the orders of the Bombay Government are required, and that any subject requiring the instructions of His Excellency the Governor in Council should be separately submitted to the Bombay Government. The Government of India themselves having already received the technical reports and statistical results of agricultural experiments does not require in the Annual Report more than an historical summary of the administrative action of the department under each part into which the report is divided and of any useful results of a positive character which may have been obtained in the field of agricultural experiment and to which, from the interest which may attach to them, it may be considered desirable to attract special notice in the annual report.

(G. I., R. & A., No. 407-41-3-A., dated 25th May 1887; *vide* G. R. No. 4079, dated 4th July 1887.)

15. The steps taken by the Agricultural Department under each Local Government for securing the more complete analysis of the rural economy and condition of the province, and the progress made towards its completion, should be reported in the periodical reports of that Department. (G. I. R. & A., No. 75-G., dated 2nd October 1883; *vide* G. R. No. 8107, dated 3rd November 1883.)

16. The Director of Land Records and Agriculture should enter in his annual reports a clear and concise resumé of all the reports on cattle disease received by him. (G. Rs. Nos. 5487, dated 18th August 1887, and 5220, dated 19th July 1893.)

17. The subject of the fertilization of the soil by the application of bone-manure should receive the serious attention of the Agricultural Department. The question of introducing cheap bone-crushers and other aids to the preparation of the manure is of primary importance in connection with the preservation of one of the valuable manu-

rial resources of the country. Experiments as to the effect of bone-manure on various crops under different conditions are also essential to enable the Directors of Agricultural Departments to determine under what circumstances bones can be most usefully employed in India. Any action which it may be found possible to take to promote the utilization of bone-manure in India by experiment or otherwise should be specially noticed in the annual reports of the Agricultural Department. (G. I., R. & A., No. 12-96-1A., dated 11th June 1891; *vide* G. R. No. 4718, dated 11th July 1891.)

18. Collectors should forward Agricultural Statistics punctually to the Director of Land Records and Agriculture for inclusion in his Annual Administration Report and supply that officer with explanations regarding variations in statistics. (G. R. No. 2825, dated 13th April 1889.)

19. Requisitions for inquiry into insect pests may be sent to the Superintendent of the Indian Museum by the Director of the Agricultural Department of the province to whom reference should in the first place be made by the District or Divisional Officer who is desirous of having an enquiry instituted. The Director should include in his annual report a brief account of any proceedings taken in this direction during the year. (G. I., R. & A., No. 62-20-102-A., dated 20th September 1889; *vide* G. R. No. 7590, dated 9th October 1889.)

20. The Director should in future reports supply information showing what percentage of the crop, waste and boundary mark inspection done by the total number of Kulkarnis in each district has been tested, in the year, by the Circle Inspector Staff, and what percentage of the work of the latter has been tested by the supervising officers of the Agricultural Department and, if possible, also by those of the Revenue Department. Government desire merely to satisfy themselves generally that the tests have been sufficient in quantity to be of real use as a check on the perfunctory performance of uncongenial duties, and provided this information is furnished, the Director need not, unless there is any special reason for doing so, include in his report detailed statistics of the work which are of value only to the officers of the districts concerned. (G. R. No. 1474, dated 22nd February 1890.)

21. Collectors should communicate their remarks on the subject of the organization and maintenance of village records to the Director of Land Records and Agriculture for incorporation in his report. It should be understood, however, that the Collectors are to continue to enter the subject in their own annual administration reports, but the Commissioner's detailed review thereof will be found in submitting the Director's report. (G. R. No. 6123, dated 28th July 1892.)

22. The record of the work of Superintendents which is directly connected with that of the agricultural staff, should be included in the annual report of the Agricultural Department. (G. R. No. 3169, dated 2nd May 1893.)

23. The Director of Land Records and Agriculture should furnish in his annual reports a statement giving under Head III.—Collection of Revenue and Rental in Precarious Tracts—a brief notice of the ordinary processes of revenue collection in tracts so classed, as well as of any special measures which it may have been necessary to take under the Famine Relief Code. (G. R. No. 10074, dated 23rd December 1892.)

24. With a view to the bringing under review at one time of the whole land administration of the Presidency exclusive of Sind, the annual report of the Department of Land Records and Agriculture will not in future be reviewed separately either by the Commissioners or by Government, but when it is circulated to the public, copies will be sent to the Commissioners, who should then draw up their jamábandi reports with the report of Collectors as well as the report of the Department of Land Records and Agriculture before them. The report of the Department of Land Records and Agricultue will then be printed with the jamábandi reports, being treated as an appendix thereto, and be reviewed by Government together with the jamábandi reports. This review, with the compilation, will then be submitted to the Government of India. (G. Rs. Nos. 7542, dated 14th October 1893, and 8791, dated 30th November 1893.)

25. The Collectors should furnish at the end of December of each year a memorandum containing information concerning weather and crops to the Director of Land Records and Agriculture in order to enable him to include an accurate and complete account of each district in his annual report. (G. R. No. 8255, dated 2nd December 1887.)

26. A special paragraph should be devoted to the subject of the maintenance of traverse survey marks in the annual report of the Department of Land Records. (G. I., R. & A., No. 510-19-71, dated 10th March 1892; *vide* G. R. No. 3327, dated 11th April 1892.)

27. The rule* laid down by the Government of India that "no official letters to Her Majesty's Government or to the Government of India, and no Resolution or other official paper that would in ordinary course be reported to either of those authorities should be made public by Local Governments, until the interval has elapsed which is required for their transmission to the superior authorities" should be observed in the case of the Annual Report of the Director of Land Records and Agriculture. (G. R. No. 189, dated 12th January 1886.)

* *Vide* G. of I. No. 19-861, dated 6th May 1878.

28. Copies of all reports relating to vegetable products published by the Government of Bombay and by the Agricultural or Horticultural Societies in the Bombay Presidency should be sent through the India Office for transmission to the Royal Gardens at Kew (S. of S., No. 1 (Rev.), dated 15th January 1880; *vide* G. R., No. 1292, dated 11th March 1880.)

29. Copies of all reports relating to vegetable products or the material resources of the country should, as soon as they are published, be sent direct to the India Office superscribed "for the Royal Gardens, Kew." The following is an exemplar list of the kind of reports, &c., which might be sent in addition to any special publications issued by Local Governments. The reports should be regularly forwarded to avoid any ground of complaint on the part of the Kew authorities :—

1. Annual Reports of the Department of Land Records and Agriculture.
2. Annual Reports on Botanical and Public Gardens.
3. Annual Forest Administration Reports.
4. Annual Reports on Cinchona Plantations.
5. Annual Museum Roports.
6. Annual and other Reports by Botanical Officers.
7. Annual Tea and Coffee Reports.
8. Arboricultural Report.
9. Crop Experiment Report.
10. Experimental and Model Farm Reports.
11. Notes, Bulletins and Selections on Vegetable and Economic Products.
12. Provincial Agricultural Ledger Series.
13. Annual Reports on Inland Trade.

(G. I., R. & A., Nos. 37-A., dated 16th August 1882, 55-A, dated 30th April 1884, 16-33, dated 25th April 1893; *vide* G. Rs. Nos. 4589, dated 7th June 1884, and 5666, dated 5th August 1893.)

30. Copies of all reports and papers on the economic products of India published by Government should be systematically sent to the Secretary of State for record in the India Office, and for transmission to the Kew Museum (S. of S. No. 23 Rev., dated 10th March 1887; *vide* G. I., R. & A., No. 26-72-3A., dated 5th May 1887, and G. R. No. 3353, dated 30th idem.)

31. Whenever publications on agricultural subjects are communicated to the Government of India for information, it should be stated in the forwarding letter whether they have been or are about to be duly circulated to other provinces. (G. I., R. & A., No. 51-A., dated 24th April 1884; *vide* G. R. No. 3916, dated 15th May 1884.)

32. Her Majesty's Secretary of State in his despatch No. 7, dated 21st January 1892, has drawn atten-

tion to the great inconvenience due to the occasional employment in botanic-economic reports published under the authority of Government, of absolute scientific names of plants, and desired the uniform use in all such official reports of the nomenclature established by Sir Joseph Hooker's 'Flora of British India' and the official 'Dictionary of the Economic Products of India.' Considerable inconvenience has also been caused to the Government of India by the use in official reports generally of vernacular and unscientific names in describing or referring to natural and economic products. His Excellency the Governor General in Council is, therefore, pleased to issue instructions that economic products, whether plants or not, should be described by the scientific name adopted in the official Directory, either used alone or written in brackets after any English or vernacular name which may be employed. The nomenclature of economic plants dealt with in the Dictionary of Economic Products is practically based on the 'Flora of British India' to which no further reference need be made in such cases. In the case of plants not being economic products, and not, therefore, included in the Economic Dictionary, the Flora itself should be consulted; but if this work is not available, or difficulty is experienced in identification, reference may be made to the Agricultural Department or to the botanical authority of the province. (G. I., R. & A., No. 654-89, dated 14th March 1892; *vide* G. R. No. 3264, dated 7th April 1892).

33. It is of importance that facts and statistics regarding any special subject should be presented in a form in which they can be easily brought together and ledgered under an appropriate head. This object can be best fulfilled by the establishment of some arrangements under which useful information of sufficient value to be recorded for purposes of future reference should be published in separate sheets, pamphlets or reports, which may be from whatever province received, bound up or otherwise gathered together in appropriate ledgers. The appended instructions for the maintenance of a uniform series of agricultural ledgers have accordingly been formulated. While it is necessary that the system of recording information which it is desirable to circulate throughout India should be uniform, this scheme is not intended in any way to interfere with the continuance or establishment of any scheme of publication that may be considered desirable for provincial purposes:—

(1) Any interesting or instructive papers, notes, and statistics on subjects dealt with by Departments of Land Records and Agriculture should be printed separately for distribution to all Agricultural Departments, or to any other Departments, officials, or individuals who may wish to have them for incorporation in ledgers.

(2) A series of agricultural ledgers will be maintained, which will be uniform in all offices,

whether of the provinces or of the Government of India.

(3) A classification of subjects for which it is considered that separate ledgers might be maintained is given in the appendix. Uniformity in sub-heads is not a matter of importance.

(4) Any information, whether included in an official report, or not, considered to be of sufficient general interest to justify its inclusion in the agricultural ledgers, should be printed separately so as to admit of its being filed under the appropriate ledger heading.

(5) When such information is included in a report, it may be perhaps conveniently printed off from the type of the report before the type is broken up.

(6) As far as possible, each note or set of statistics should refer to one subject only.

(7) The ledger series should be printed on the same size of paper and when possible in similar type, and, as a rule, on one side of the sheet; (this is not essential in the case of lengthy articles).

(8) The ledger series will, for purposes of convenient reference, be uniformly numbered in all Provincial and Imperial offices, and the serial number to be assigned to each pamphlet or paper will be arranged by the Government of India. For this purpose the subject of any note which it is proposed to print should be reported to the Reporter on Economic Products, Indian Museum, Calcutta.

(9) All subjects which can be brought under economic products will be referred to the serial numbers in the official "Dictionary of Economic Products."

(10) Notes of only local interest will not be brought into the Imperial series.

(11) Lengthy pamphlets or papers containing a material proportion of unimportant matter should not, as a rule, be issued *in extenso*. Abstracts of them including, if necessary, brief extracts will suffice, and be more likely to receive perusal.

(12) In some cases it will be sufficient merely to place on record in a ledger sheet references to interesting or useful papers of which it is desirable not to lose sight with brief paragraphs indicating their character.

(13) A brief introductory preface should precede any paper or extract explaining the points to which it is desired to invite attention.

(14) An index of the numbers of the ledger series issued during each year will be prepared by the Government of India, and circulated for general use.

(15) All correspondence connected with the agricultural ledger series will be conducted, on

behalf of the Government of India, by the Reporter on Economic Products (Indian Museum, Calcutta).

APPENDIX.

No.	Main Head.	Examples of Sub-heads.
1	Agricultural Economics ...	Advances; Assessments; Debt; Prices; Rents; Tenures; Transfers; Wages.
2	Agricultural Education ...	Forms; Object Lessons; Primers; Schools.
3	Agricultural Entomology and Insect Pests.	Insecticides; Locusts; Sugar-cane Borers.
4	Agricultural Implements ...	Ploughs; Sugar mills.
5	Agricultural Improvement ...	Farm experiments; Seed Selection.
6	Arboriculture	Fruit trees; Vine cultivation.
7	Dairying	Cheese-making; Cream-separators.
8	Fertilisers	Bat Guano; Bones; Coprolites.
9	Internal Trade and Communication.	Railways; Wheat adulteration.
10	Irrigation	Canals; Water-lifts; Wells.
11	Plant diseases	Potato disease; Rusts and Mildews.
12	Soils	Reclamation of Salt plains; Reh; Soil classification and Survey.
13	Veterinary	Anthrax; Cattle-breeding; Horse-breeding; Prevention of disease.
14	Products*	1. Food for human use. 2. Special famine foods. 3. Fodders. 4. Stimulants; Beverages; Narcotics. 5. Oil-seeds; Oils; Soap and Perfumery. 6. Drugs; Medicines; Chemicals. 7. Gums and Resins. 8. Dyes; Tans; Mordants; Pigments and Paints. 9. Fibres and Fibrous Plants. 10. Hides; Leather; Horns. 11. Canes; Bamboos and Grasses. 12. Timbers. 13. Minerals. 14. Domestic Products.

* The classification adopted is that which has been followed at Exhibitions and a he Imperial Institute.

(G. I., R. & A., Nos. 31-52, dated 19th August 1892, and 17-51, dated 4th May 1893; *vide* G. Rs. Nos. 7579, dated 24th September 1892, and 4203, dated 9th July 1893.)

PART V.—FORECASTS OF CROPS.

1. The Government of India have decided that, for the present at least, three memoranda on the Indian $\frac{\text{wheat crop}}{\text{oil-seeds crop}}$ shall be published by it during each season. The first of these will be a rough account of the state of the crop, and will not, except in cases in which details can be supplied without trouble by Local Governments, contain information as to area. This statement will be published immediately before the close of the calendar year. The second memorandum, which will be issued about the 15th March, will give as accurate information as may then be procurable regarding both the estimated area and the state of the crop. In the latter half of May the third memorandum will be published, and will contain revised and fuller information on the points mentioned in the second statement. In order to admit of the punctual preparation of these memoranda the Government of India desire that the necessary data may be supplied in time to reach them* at the latest on the 20th December, the 1st March and the 15th May, respectively. It will be convenient that the first two reports, which should give the latest information available at the time of their submission, should be made by telegraph. Fullness of detail being of more importance in regard to the third memorandum, the reports on which it is to be based should be forwarded in writing. The value of the reports on the wheat crop will be much enhanced by a general statement regarding the character and prospects of the other food crops, as this will enable persons interested to draw their own conclusions as to the amount likely to be available for exportation. (G. I., R. & A., No. 20-4-82-A., dated 3rd March 1886; *vide* G. R. No. 2324, dated 25th idem.)

2. As regards the wheat reports, the dates prescribed have necessarily been chosen with reference to the requirements of the Punjab, the province in which the wheat crop comes latest to maturity. There is no objection to the Director of the Bombay Agricultural Department submitting his reports and placing them at the disposal of the mercantile community as soon as he can do so, though they can only be embodied in the Imperial forecasts at a somewhat later date. (G. I., R. & A., No. 554-A.-4-169, dated 9th June 1886; *vide* G. R. No. 4585, dated 26th idem.)

3. The following general instructions should be observed in the preparation and publication of seasonal reports on the oil-seed crops.

The crops which will be regularly reported on in future are linseed, rapeseed, and sesamum. But if

* Under later instructions (*vide* G. I., R. & A., No. 15-52-6, dated 23rd May 1895; G. R. No. 4678, dated 21st June 1895) these returns are to be forwarded to the Director-General of Statistics.

in any province other oil-seeds of commercial importance are grown, their inclusion in the prescribed reports is unobjectionable, provided that they are separately shown. The report on linseed and rapeseed now incorporated with the wheat forecasts, should be separately published; the two crops should also be kept distinct and not treated together under the general head of oil-seeds.

For Bombay the Department of Land Records and Agriculture will submit reports on rapeseed and linseed in accordance with the instructions previously issued in the Circular of 3rd March 1886.

As regards sesamum, the Government of India desire to be furnished with three reports * similar in character to those already prepared for linseed and rapeseed from the provinces noted on the margin. The first report will give, in general terms, a character of the season and the state of the crops; the second will contain a fuller report on prospects and a rough estimate of area; and the third complete statistics of area and probable outturn. The dates which have been suggested, by the various provincial authorities, for the submission of the reports on sesamum, range from 1st August to 15th January, and the 15th August, 15th October, and 1st January will probably be found generally suitable, except in Madras, where the existing dates will be maintained.

Bombay, North-Western Provinces and Oudh, Central Provinces, and Berár.

A special difficulty in estimating area and outturn arises in the case of oil-seeds owing to the almost universal practice of growing them as mixed crops. In some provinces the areas of the several crops composing a mixture are already recorded separately, in others the areas under mixed crops are recorded in a lump for each field, and standard formulæ have been framed after experiment and local enquiry for calculating area and outturn of the crops composing the mixture. In such provinces there will be no difficulty in furnishing the necessary figures. But in the provinces where neither of these systems is in force, there may be difficulty in giving the areas under oil-seed grown as a mixed crop. In these cases the Government of India will not object to the statistics and information in the forecasts being restricted to the area on which the crop is grown unmixed, leaving the area and outturn of the mixed area to be roughly estimated at such proportion to the unmixed area as may have been determined by special enquiry. But apart from the requirements of forecast reports, the Government of India consider that in provinces where the mixed area of any crop is an important factor in the total production, measures should be taken in the interests of the accuracy of agricultural statistics at

* Under later instructions (*vide* G. I., R. & A., No. 15-52-6, dated 23rd May 1895; G. R. No. 4678, dated 21st June 1895) these reports are to be furnished to the Director-General of Statistics.

large to ensure a record of such areas, and the framing of careful standards for reducing them to an equivalent in unmixed areas.

(G. I., R. & A., No. 347–357 C., dated 13th March 1890; *vide* G. R. No. 2904, dated 29th April 1890.)

4. In circular dated the 3rd March 1886, (No. 20–4–82), the Governments of Bombay, North-Western Provinces and Oudh and Punjáb, and the Administrations of the Central Provinces and Berár, were desired to furnish the Government of India with two reports on the cotton crop, *viz.*, the first on the 15th July, showing the character of the crop, and the second on the 15th October, giving the fullest details available as to both the area and prospects of the crop. These dates having been found unsuited to the Bombay Presidency, they were altered to 10th September and 10th December for the early districts, and 10th October and 10th February for the late districts.

The expediency of publishing more frequent reports on the Indian cotton crop during the period the crop is on the ground, has recently been made the subject of a representation to the Secretary of State on behalf of merchants in the United Kingdom interested in the cotton trade. In forwarding this representation to the Government of India, His Lordship desired that the question should be considered whether monthly abstracts might not be published for the whole of India, giving estimated figures of area and probable outturn for each province, with totals for the whole of India.

The Government of India consider that some attempt should certainly be made to meet the wish of the commercial community in this country, as well as in the United Kingdom, for earlier and fuller information, and have arrived at the conclusion that no great disturbance of existing arrangements would be caused by the publication of four two-monthly reports, beginning with the period when the greater portion of the early crop has been sown and ending with the arrival of the season for the harvesting of the late crops. For provinces in which only the early variety is cultivated, three reports will suffice, but a fourth is necessary where the late varieties are also grown.

The Government of India have accordingly resolved that four general summaries shall be published, on the 20th August, 15th October, 15th December and 15th February. The first summary will contain an estimate of the area sown with the early crop, as compared with the normal area on that date, with remarks as to the general condition and prospects of sowings; the second, a corrected and completed estimate of the area of the early crop, and the sowings to date of the late crop, together with a report on the condition and prospects of both crops. The third summary will deal fully with the area and outturn of the early crop, and give further

information regarding the condition and area of the late crops. The fourth and last summary will review the harvest of both early and late crops.

To admit of the punctual compilation of these summaries, the following separate reports* are required from the provinces on the dates mentioned :—

August 15th.—First report, early crops, from Madras, Bombay, North-Western Provinces and Oudh, Punjáb, Central Provinces and Berár.

October 10th.—Second report, early crops, from Madras, Bombay, North-Western Provinces and Oudh, Punjáb, Central Provinces and Berár. First report, late crops, from Madras and Bombay.

December 10th.—Final report, early crops, from Madras, Bombay, North-Western Provinces and Oudh, Punjáb, Central Provinces and Berár. Second report, late crops, from Madras and Bombay.

February 10th.—Final report, late crops, Madras and Bombay.

The Directors of Local Departments of Land Records and Agriculture should use every effort to make these forecasts trustworthy sources of information to the public, and in the few instances where the revised dates entail the submission of earlier reports than are at present supplied, to secure their punctual issue. The dates have been determined with reference to the demand for early and reliable information, and to the necessity for uniformity in the period of reporting in order to allow of the publication of general summaries. For no province, however, has an earlier date been fixed than has been found possible by experience in other provinces similarly circumstanced.

The Government of India also desire that great care may be taken in every case to express the outturn in terms of "cleaned cotton," that is, cotton with the seeds extracted. For the return of areas over which cotton is sown as a mixed crop, attention should be had to the instructions furnished in Government of India, Revenue and Agricultural Department, Resolution No. 347–357 C–Agriculture of 13th March 1890, regarding the returns of mixed oil-seed crops. Figures which are estimates should invariably be shown as such, and the calculations of outturn should be systematically verified by the statistics of consumption and trade.

(G. I., R. & A., No. 358–369 C–Agriculture, dated 13th March 1890; *vide* G. R. No. 2904, dated 29th April 1890.)

5. All Political Officers attached to Native States should be impressed with the necessity of causing proper arrangements to be made for the supply to

* Under later instructions (*vide* G. I., R. & A., No. 15-52-6, dated 23rd May 1895; G. R. No. 4678, dated 21st June 1896) these reports are to be forwarded to the Director-General of Statistics.

the Director of Agriculture in due time of the required statistics regarding their States for embodiment in his general crop telegrams. (G. R. No. 1816, dated 3rd March 1885.)

6. The Director of Land Records and Agriculture should state in the crop forecasts submitted by him whether or not figures for the Baroda State are included. (G. I., R. & A., No. 808-4-B-5-A., dated 27th April 1891; *vide* G. R. No. 3309, dated 13th May 1891.)

7. Crop forecasts should be prepared in all provinces on the system under which an average crop is denoted by one rupee. (G. I., R. & A., No. 129-A-7-197, dated 6th November 1885; *vide* G. R. No. 6685, dated 21st September 1886.)

8. The Government of India have decided that in future it shall be left to Local Governments and Administrations to fix the scale of notation to be used in forecasts of crops for themselves in accordance with local conditions, the object being to secure that the returns are in terms of a normal crop. To secure conformity with local usage, it may even be necessary to use different scales in different parts of the same province. This being so, it is obvious that the anna standard will no longer possess any fixed or uniform value, and will, therefore, be unsuitable for use in any published forecasts. In all future forecasts that may be furnished to the Government of India or the Director-General of Statistics the use of the anna notation may be entirely discontinued, and the American notation used in its stead, 100 being taken to represent a normal crop, and the estimated outturn being stated as a percentage of that crop. Indeed, there is reason to believe that, apart from the formal periodical forecasts, all estimates of crop-outturn furnished to the Government of India—such, for instance, as were reported in connection with the famine of 1896-97—are subject to the same uncertainty of standard; and in future, whenever outturn is mentioned in such cases, either the American notation may be used, or, if the anna scale is preferred, the standard on which it is based may be stated. A brief parenthesis (so many annas = normal) is quite sufficient.

It will be noticed that in the above instructions the word 'normal' has been substituted for 'average.' The normal crop has been defined as 'that crop which past experience has shown to be the most generally recurring crop in a series of years; the typical crop of the local area, the crop which the cultivator has a right (as it were) to expect, and with which he is (or should be) content, while if he gets more he has reason to rejoice, and if less he has reason to complain.' This will not necessarily correspond with the average crop of a series of years, which is indeed an arithmetical abstraction and may possibly never occur. For it is obvious that in a tract in which the agricultural standard is low and the harvest precarious, the yield of the year will fall

below the normal, as above defined, more often and more largely than will be the case in a highly cultivated and well-irrigated tract, and that in the former case the average will probably be considerably below the normal, while in the latter it will probably approximate very closely to it. (G. I., R. & A., No. 9-27-4, dated 23rd October 1897; *vide* G. R. No. 725, dated 1st February 1898.)

In accordance with the foregoing instructions of the Government of India, 12 annas should be taken as representing a normal crop in all reports and returns submitted in future, and the attention of all officers should particularly be drawn to the distinction between a normal and an average crop. The necessary calculations for showing the estimates in the American notation will be made in the office of the Survey Commissioner and Director of Land Records and Agriculture while compiling the Presidency forecast reports for the Government of India. (G. R. No. 725, dated 1st February 1898.)

9. As it is desirable that the commercial community should obtain as early information as possible regarding the condition and prospects of the crops, the Agricultural Department should in future send a copy of the crop forecast to the principal newspapers in the province at the same time that they are telegraphed or forwarded by post to the Government of India.* The Agricultural Department should, however, not publish actual figures if estimated figures have previously been published by the Government of India. (G. I., R. & A., No. 25-A-5-2, dated 4th May 1887; *vide* G. R. No. 4159, dated 6th July 1887.)

10. The utility of forecasts is enhanced in proportion to the promptitude with which they reach the persons interested in the information which they contain. Moreover, where facilities for printing exist in the provinces, no appreciable advantage is gained from the printing and distribution of forecasts by the Government of India, while the delay due to the time occupied in transmission would be saved by direct distribution. In future, therefore, the direct distribution at present effected by the Local Agricultural Departments under the orders contained in Circular No. 25-A of 4th May 1887, should be extended so as to include the entire distribution now made by the Government of India.

The forecasts now reported* to the Government of India by telegram will continue to be so reported in order that the general summaries prepared and published by the Imperial Department of Revenue and Agriculture may be issued with punctuality. Other forecasts may be submitted either in manuscript or in print, provided they reach the Government of India by the prescribed dates.

It would be convenient if the Provincial reports and Imperial summaries could be uniform in size

* Under later instructions (*vide* G. I., R. & A., No. 15-52-6, dated 23rd May 1895; G. R. No. 4678, dated 21st June 1895) these forecasts of crops are to be reported to the Director-General of Statistics.

and type, and the form employed by the Government of India should as far as possible be adopted.

(G. I., R. & A., No. 2-5, dated 11th February 1892 ; *vide* G. R. No. 1521, dated 1st March 1892.)

11. The Government of India desire that in the final reports on the wheat crop information may be furnished in connection with the prices and general condition of the supply of food-grains in the Province. The main questions are—

(*a*) Whether the produce of the year's supply of food-grains has been much above or below the average ;

(*b*) Whether the food stocks of former harvests are plentiful or not ;

(*c*) Whether prices of food-grains generally have ruled higher or lower than usual ; and

(*d*) What have been the causes which have caused increase or decrease of exports of wheat and how far has the movement been influenced by a scarcity or otherwise of food-grains.

(G. I., R. & A., No. 8-5-4-A., dated 30th March 1888 ; *vide* G. R. No. 2311, dated 17th April 1888.)

12. The District officers in Sind should state, in their forecast returns for wheat and cotton, the estimated yield per acre *in pounds* to enable the Director of Land Records and Agriculture to give complete statistics showing the outturn of the crops for the whole of the Presidency as desired by the Government of India. (G. R. No. 6354, dated 28th August 1889.)

13. In the forecasts of cotton crop published by Provincial Governments, the yield should be shown in bales of 400 pounds of clean cotton. (G. I., R. & A., No. 10-3 L.-18-A., dated 4th June 1890 ; *vide* G. R. No. 4561, dated 30th idem.)

14. The first or preliminary forecasts of the cotton and oil-seed crops and the first and second reports on the prospects of the wheat crop should be transmitted to the Government * of India by telegraph. (G. I., R. & A., Nos. 24-3 L-28-A., dated 15th August 1890, and 1683-3 L-37-A., dated 29th October 1890 ; *vide* G. Rs. Nos. 6387, dated 9th September 1890, and 8238, dated 20th November 1890.)

15. The following form should be used in submitting the final crop forecasts of the Bombay Presidency. The appended memorandum of suggestions may be conformed to in the compilation of these forecasts as nearly as the circumstances of the Presidency admit. Particular importance is attached to the suggestions in paragraph 4. To the final forecast of the Bombay cotton crop, the Director of Land Records and Agriculture should append a statement showing district details.

* Under later instructions (*vide* G. I., R. & A., No. 15-52-6, dated 23rd May 1895 ; G. R. No. 4678, dated 21st June 1895) forecasts of cultivation and of outturn of crops are to be communicated to the Director-General of Statistics.

Final Forecast of the *Crop in the*

District.	Acreage.					Estimated yield of current year, i.e., of area in column 2 (1895-96).
	Of current year's crop (1895-96).	Of previous year's crop (1894-95).	Average of preceding years.	Percentage by which column 2 exceeds (+) or is less than (—) area in		
				Column 3.	Column 4.	
1	2	3	4	5	6	7
			(a) Five years. / (b) Ten years.		(a) Five years. / (b) Ten years.	

Note.—The years on which the average is calculated should be *exclusive* of the year for which figures are given in columns 3 and show figures for 1894-95 and columns 4 and 9 for (*a*) 1889-90 to 1893-94, (*b*) 1884-85 to 1893-94.

In columns 2, 3 and 4 the figures should be in acres; in columns 7, 8 and 9 they should be *in tons for wheat and oil-seeds*, in c should be given in tons, cwt, or lb. as may be found convenient.